A NEW SPINNING MITE ATTACKING STRAWBERRY ON THE MID-ATLANTIC COAST.

By E. A. McGregor,

Bureau of Entomology and Plant Quarantine, U. S. Department of Agriculture.

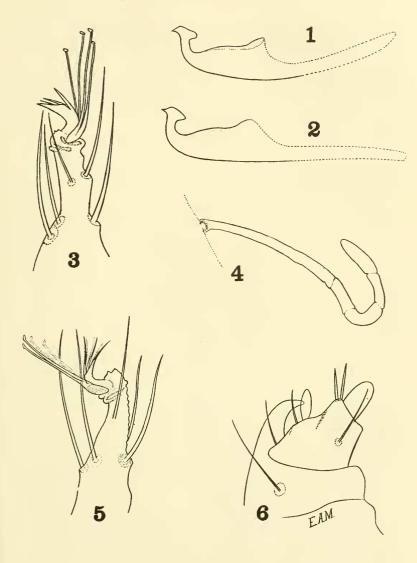
Tetranychus atlanticus, new species.

Female.—Body setae fairly conspicuous, not arising from tubercles, 26 in number. Mandibular plate rounded anteriorly at maturity. A single perfect eye cornea on each side. "Thumb" of palpus barely longer than greatest thickness, bearing terminally a nonclavate "finger" which is rotundate terminally, fully two-thirds again as long as thick, and is more than one-half as thick as "thumb" at tip; the unusually thick dorsal sensilla is nearly as long as the terminal "finger"; the other five hairs and setae of the "thumb" about as usual. Legs of moderate length, foreleg about two-thirds the length of the body. Relative lengths of the joints of foreleg as follows: Coxa, 28; trochanter, 11; femur, 28; patella, 17; tibia, 19; tarsus, 27. Tip of tarsus (female) bearing a claw which is sharply bent and is cleft into three pairs of subequal, needlelike spurs, the inner pair being the thickest at base. The usual four tenent hairs arise from the onychium, a pair on each side of the claw base. The collar trachea is of the conventional *Tetranychus* type, in the shape of a U with one long and one short arm.

Male.—Body somewhat wedge-shaped, much shorter and narrower than that of female; legs proportionately longer. Penis with inner lobe rodlike; basilar lobe reduced to an abtuse prominence; shaft about three-fourths again as long as its basal thickness, bent abruptly upward nearly 90° from axis of main shaft, expanding terminally to form the prominent barb whose axial length slightly exceeds the length of the "hook" of the shaft and is fully one-third the length of the shaft proper; posterior portion of barb produced into an acuminate point; anterior portion of barb produced into an equally prominent rounded boss; axis of barb directed somewhat upward posteriorly. Tarsal claw of foreleg differing from those of other three pairs of legs and from those of female, as is usual with red spider males; distal portion (corresponding to the main claw) straight and relatively weak, the proximal portion (analagous to the deflexed spurs in certain genera) much thicker at base and appearing to be 3-pointed terminally.

Type slide.—U. S. National Museum No. 1380.

The type material is from Chadbourn, N. C., September 25, 1939, from strawberry, collected by Floyd F. Smith and W. A. Thomas. To date this mite has been collected from eight localities in four States as follows: Pocomoke, Md., Chadbourn, N. C., Norfolk, Va., Accomac County, Va., Diamond Spr., Va., Princess Anne Court House, Va., Northampton County (Va.?), and Parma, Idaho. The eastern collections were all from strawberry, while the Idaho collection was from red clover. Mr. R. W. Haegele, who sent the material from Idaho, stated that on several occasions strawberry plants have been shipped



into Idaho from a nursery in Maryland. This might account for the occurrence in Idaho of this Atlantic Coast mite. The records show that the strawberry *Tetranychus* was first collected by W. A. Thomas at Pocomoke City, Md., May 22, 1939. Others who have since collected this mite are R. W. Haegele, H. G. Walker, F. F. Smith, and Carl Anderson.

The present species is perhaps closest to T. althaeae v. Hanst.

The two species may be distinguished as follows:

Tetranychus althaeae.

Palpus of female with terminal "finger" slightly clavate, obscurely angular at tip, one-fourth longer than thick, less than one-half as thick as terminal aspect of "thumb." Axial length of barb of penis less than one-fourth that of shaft; as viewed laterally, the anterior and posterior projections of barb of penis each in the form of an acute point; axis of barb not directed upward posteriorly.

Tetranychus atlanticus.

Palpus of female with terminal "finger" non-clavate, rotundate terminally, fully two-thirds again as long as thick, but more than one-half as thick as terminal aspect of "thumb." Axial length of barb of penis fully one-third that of shaft; as viewed laterally, the posterior projection of penis barb in form of an acute point, the anterior process of barb in the form of a rounded boss; axis of barb directed somewhat upward posteriorly.

EXPLANATION OF PLATE.

Tetranychus atlanticus.

- Figs. 1 and 2. Lateral view of penis (Fig. 1 from material from red clover, Parma, Idaho; Fig. 2 from material from strawberry, Pocomoke City, Md.).
- Fig. 3. Tip of tarsus of leg I of male, viewed laterally.
- Fig. 4. Collar trachea, viewed laterally.
- Fig. 5. Tip of tarsus of leg I of female, viewed laterally.
- Fig. 6. Terminal portion of palpus (Q) with appendages, viewed laterally.